MIL–STD–810E
14 JULY 1989
SUPERSEDING
MIL–STD–810D
19 JULY 1983

DEPARTMENT OF DEFENSE
TEST METHOD STANDARD
FOR
ENVIRONMENTAL ENGINEERING CONSIDERATIONS
AND LABORATORY TESTS

AMSC F4766

FSC ENVR

Supersedes cover page of MIL–STD–810E

NOTICE OF CHANGE

NOT MEASUREMENT SENSITIVE

MIL–STD–810E
NOTICE 3
31 JULY 1995

DEPARTMENT OF DEFENSE

ENVIRONMENTAL TEST METHODS AND ENGINEERING GUIDELINES

TO ALL HOLDERS OF MIL–STD–810E:

1. THE FOLLOWING PAGES OF MIL–STD–810E HAVE BEEN REVISED AND SUPERSEDE THE PAGES LISTED:

NEW PAGE	DATE	SUPERSEDED PAGE	DATE
i	31 JULY 1995	i	14 JULY 1989
ii	31 JULY 1995	ii	1 SEPTEMBER 1993
iii	31 JULY 1995	iii	1 SEPTEMBER 1993
iv	31 JULY 1989	iv	14 JULY 1989
v	31 JULY 1989	v	14 JULY 1989
vi	1 SEPTEMBER 1993	vi	REPRINTED WITHOUT CHANGE
1	31 JULY 1995	1	14 JULY 1989
2	31 JULY 1995	2	14 JULY 1989
3	31 JULY 1995	3	14 JULY 1989
4	31 JULY 1995	4	14 JULY 1989
7	14 JULY 1989	7	REPRINTED WITHOUT CHANGE
8	31 JULY 1995	8	14 JULY 1989
11	31 JULY 1995	11	14 JULY 1989
12	1 SEPTEMBER 1993	12	REPRINTED WITHOUT CHANGE
19	31 JULY 1995	19	14 JULY 1989
20	31 JULY 1995	20	14 JULY 1989

2. RETAIN THIS NOTICE AND INSERT BEFORE TABLE OF CONTENTS.

AMSC F4766 AREA ENVR

FOREWORD

This test method standard is approved for use by all Departments and Agencies of the Department of Defense. Although prepared specifically for DoD applications, this standard may be tailored for commercial applications as well.

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: ASC/ENSI, Bldg 125, 2335 Seventh St Ste 6, Wright–Patterson AFB OH 45433–7809 by using the Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

MIL–STD–810E has been revised to require careful attention to environments throughout the development process. A course of action for determining and assessing the environments to which an item will be exposed during its service life has been added to section 4, General Requirements. The additional General Requirements aid in preparation for design and preparation for test. Documentation requirements for the design and testing process have also been added to section 4.

The bulk of the standard remains devoted to test methods. Individual methods have been revised to encourage accurate determination of the environmental stresses that an equipment will encounter during its service life. Guidance for accelerated or aggravated testing during the design process is included in some cases. Each test method has been divided into two sections: Section I provides guidance for choosing and tailoring a particular test procedure, Section II includes step–by–step test procedures. In some methods, not only the test values, but also the sequence of steps is tailorable.

The result of this revision will be that this standard cannot be called out or applied as a fixed, relatively simple routine. Instead, an environmental engineering specialist will have to choose and alter the test procedures to suit a particular combination or sequence of environmental conditions for a specific equipment application.

The methods of this standard are not intended to satisfy all safety compliance testing requirements.

Technical questions may be addressed to the following offices:

Aeronautical Systems Center
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2335 Seventh Street, Suite 6
Wright–Patterson AFB, OH 45433–7809
Telephone: Commercial (513) 255–3330, ext 4142
DSN 785–3330, ext 4142
FAX (513) 476–4546

Supersedes page ii of MIL–STD–810E, Notice 2.

U.S. Army Test and Evaluation Command
ATTN: AMSTE–CT–T
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Naval Air Warfare Center
Weapons Division
ATTN: Code 473140D
China Lake, CA 93555–6001
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DSN 437–4667
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TABLES

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TABLE — PAGE

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3. Holders of MIL–STD–810E will verify that page changes and additions indicated above have been entered. This notice page will be retained as a check sheet. This issuance, together with appended pages, is a separate publication. Each notice is to be retained by stocking points until the military standard is completely revised or canceled.

Custodian:
Army – TE
Navy – AS
Air Force – 11

Review activities:
Army – MI, ME, AV, GL, MT, AT, CE, AR, SM
Navy – SH, OS, YD, EC
Air Force – 10, 18, 19, 69

International interest:
See 6.3

Preparing Activity:
Air Force – 11

(Project ENVR–0042)

FIGURES

HOW TO USE THIS DOCUMENT

1. This document contains 6 sections. Sections 1 through 3 contain general information. Section 4 contains both tailoring guides and general test information that relate to the test methods of section 5. Section 5 contains climatic and dynamic test methods, and section 6 has references to contractual requirements.

2. The Procuring Activity/Developer must determine the magnitude of the tailoring effort appropriate for the program in question. Tailoring can provide long range cost savings in that materiel will be designed and developed to survive its anticipated deployment scenario.

3. Paragraph 4.2 explains the tailoring process and the steps involved (see figure 1, How To Use MIL-STD-810E). Paragraph 4.3 explains the use of measured data, and paragraph 6.2 details the contractual requirements in the form of Data Item Descriptions (DID's).

4. Each test method of Section 5 is divided into 2 parts: Section I contains background or the enclosed procedures and rationale (where possible) for the test parameters. Section II contains the step-by-step test procedures which require parameter levels that are to be developed by the environmental analyses.

5. Section 5 of this document also contains "fallback" parameter levels which can be applied in section II of each method if better information is not available.

6. The test methods of section 5 address various climatic and dynamic environments/situations. The user of MIL-STD-810E must determine which methods are appropriate for the specified program and which test procedures within the test method are appropriate.

7. Regardless of which approach is chosen, at the end of Section I of each test method, a list of information is specified that is required in order to conduct the test procedures of Section II of that method. This information must be assembled by the environmental specialist and provided to the equipment supplier.

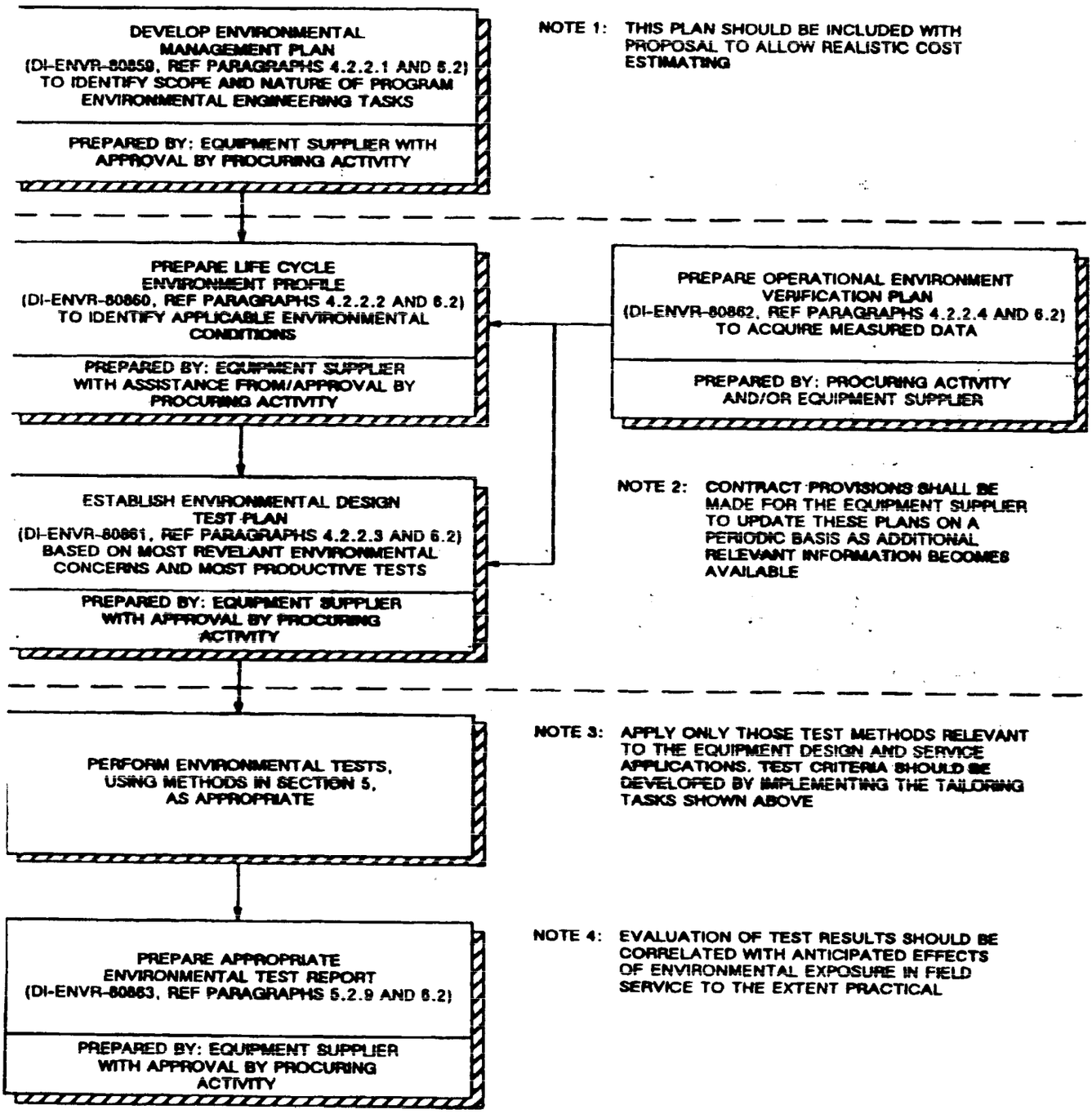

FIGURE 1. HOW TO USE MIL-STD-810E